





WORLD CLASS CAMPUS
DEVELOPMENT
AT CHARLESTON
EXECUTIVE AIRPORT
FACILITY ON JOHNS ISLAND

State of the art Eco conscious campus development in Charleston, SC.

The campus will incorporate cutting edge production, assembly, education and R&D facilities within its bespoke 132,000 sq. ft. construction set within 13 acres at Charleston Executive Airport facility on Johns Island.

At the center of this prestigious development Barzan Aeronautical will deliver its Center of Excellence (CoE). Barzan Aeronautical CoE aims to focus on best practices, research, R&D initiatives and training in the areas of aviation and defense. Its innovation observatory, as a strategic program, will be the incubator for academic, commercial and military applications. The CoE will work closely with affiliated Universities and Colleges from the US, EU and Qatar to further develop cutting edge advances in aviation and become a hub of key aeronautical engineering educational programs.





The information/material provided is distributed by Barzan Aeronautical LLC on behalf of Barzan Holdings QSTP.

Additional information is available at the U.S. Department of Justice, Washington DC.





The A5000 unmanned aircraft system is a CAT 3 (US) CAT 2 (NATO), multi-purpose UAV system delivering greater performance, endurance and payload capacity comparable with much larger Group 4 UAS platforms.

The A5000 unmanned system is an exportable UAS system with internal bays and external attachment points providing flexibility for customer-specified missions and payloads. The design builds on the expertise gained through more than two million unmanned flight hours around the world in the most austere environments, creating a high-reliability platform that is readily adapted to customer operational needs.

### SYSTEM FEATURES

- High reliability propulsion system designed to deliver low maintenance cost
- GPS based automatic takeoff and remote taxi with brakes
- Up to 1,500 watts of available power, additional available for customer-chosen payloads
- Low noise signature
- Reduced footprint system able to be transported via cargo aircraft or standard surface shipping methods
- Training, support and sustainment packages to increase operational effectiveness and system readiness





WINGSPAN 22.7 FT (6.9 M)



LENGTH 13.2 FT

(4.0 M)



4.2 FT (1.3 M)



MAX WEIGHT 720 LB (326 KG)



MAX PAYLOAD CAPACITY

115 LB (52 KG)



**ENDURANCE** 15 HOURS

### OPTIONAL KITS

SATCOM Kit: High-bandwidth satellite communication (SATCOM) equipment for Beyond Line of Site (BLOS) operations. The SATCOM configuration enables persistent BLOS operation exceeding 1,000 km providing a strategic capability in a tactical system.

EO/IR Kit: High-definition video and infrared capability for surveillance operations with significant standoff. Kit is fully developed and proven with the A5000 systems

Alternate Possibilities: Customer-specified payloads such as synthetic-aperture radar, ground moving target identification, Mode S Transponder with ADS-B, AIS (Shipborne Automatic Identification System), and other special-purpose equipment



TEXTRON Systems > PUSHING PAST POSSIBLE



The V-BAT 128 is a CAT 2 (US) CAT 1 (NATO) long endurance Vertical Takeoff and Landing (VTOL) UAS perfectly suited for land-based and maritime operations. It combines the latest payload technology, an open architecture framework for mission-specific modularity, and the ability to seamlessly transition between land and sea environments.

Securing borders, narcotics interception and threat detection. Shield Al's V-BAT is the future of tactical UAS today. V-BAT is the next-generation UAS.

V-BAT 128 is designed explicitly for runway and equipment-independent launch and recovery in austere environments with no external support. The aircraft can be transported in the bed of a truck and assembled by two personnel in under 20 minutes, making it a true expeditionary system built for dynamic movement and fluid mission sets.

- RESULTS.
- PERFORMANCE.
- SAFETY.

### Results

In head-to-head customer fly-offs, the US and allied militaries have chosen the V-BAT 128 as the next generation UAS.

### **Performance**

Ducted-fan technology enables industry leading max-takeoff weight to payload weight ratio.

### Safety

No exposed rotors, no required operator safety zones. So safe you can get hands on during takeoff and landing.

# **SPECIFICATIONS**



WINGSPAN 9.7 FT (2.9 M)



LENGTH 9 FT (2.7 M)

WEIGHT

125 LBS (FUEL + PAYLOAD)



ENDURANCE + PAYLOAD

10 HOURS WITH 30 LBS



LANDING ZONE

12FT X 12FT (3.65 M X 3.65 M)

### PAYLOAD/SENSOR INTEGRATION

V-BAT 128 supports a wide range of interchangeable and customizable payloads and sensors including, but not limited to: EO/MWIR cameras, AIS, and Land/Maritime Wide Area Search (WAS) AI-based capabilities.











Textron Systems' Aerosonde Small Unmanned Aircraft System (SUAS) is a CAT 2 (US) CAT 1 (NATO) thats delivers reliable, multi-mission performance.

Aerosonde is designed for expeditionary land and sea-based operations and equipped for simultaneous day/night full-motion video, communications relay, signals intelligence and a customer-selected payload in a single flight. It is field-proven with more than 575,000 flight hours, including desert heat and Arctic cold.

# SYSTEM FEATURES

- **Expeditionary land or sea** based operations
- Powered by Lycoming EL-005 heavy-fuel engine for benchmark-setting reliability
- Covert operation, with negligible visual and auditory signature
- Multi-intelligence (multi-INT) payloads, i.e., electronic warfare (EW) and communications relay, in a single flight

## SPECIFICATIONS



WINGSPAN

12 FT (3.7M)

RANGE

140 KM (75 NM)



POWERPLANT

LYCOMING EL-005 **HEAVY-FUEL** ENGINE



**MAX WEIGHT** 

80 LB (36.4 KG)



PAYLOAD

**UP TO 20 LB** (9.1 KG) **OR 200 W** 



**ENDURANCE** 

14+ HOURS

### PAYLOAD CAPABILITIES AVAILABLE

- Full-motion video (FMV) and day/night imaging
- Voice communications relay
- Ad-hoc networking (MANET)
- Synthetic aperture radar (SAR)
- Signals intelligence (SIGINT)
- **Communications intelligence (COMINT)**
- 3D mapping
- **Automatic identification** systems (AIS)

### AEROSONDE HQ CONFIGURATION

Combined with the Aerosonde system's proven performance and benchmark-setting reliability, the Aerosonde HQ brings unparalleled levels of mission capability and flexibility. Textron Systems' Aerosonde HQ is runway-independent using Hybrid Quadrotor technology to achieve vertical takeoff and landing (VTOL) operations, allowing the Aerosonde system to be ready to go in any environment.



**AIRSPEED** 45-65 KT

**ENDURANCE** 

10 HOURS WITH MULTI-INT PAYLOAD



TRANSITION ALTITUDE

50-150 FT (15-46 M) ABOVE GROUND LEVEL



**TEXTRON** Systems > PUSHING PAST POSSIBLE



Electra Aero is a next generation aerospace company devoted to sustainable urban & regional mobility.

Electra Aero is building electric, ultra-short takeoff and landing airplanes that fly more people and payload; quieter, further, and more affordably. Only Electra Aero's technology delivers more than twice the payload and an order of magnitude longer ranges with substantially lower operating costs than vertical takeoff alternatives with much less certification risk.

# **SPECIFICATIONS**

### **KEY FEATURES &** PERFORMANCE

- Freedom from runways Ultra-short takeoff and landing
- Freedom from noise Distributed electric propulsion
- Freedom from the grid Built-in battery charging while you fly
- Freedom from crowds Hybrid-electric versatility



WINGSPAN 50 FT (15 M)



LENGTH

45 FT (15 M)



RANGE

500 NM WITH 2000 LBS



CRUISE SPEED

175 KTS (201 MPH)



**PAYLOAD** 

2400 LBS PAYLOAD + 1 PILOT



**PASSENGERS** 

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### DELIVERING THE FUTURE OF SUSTAINABLE AVIATION



